

July 2015

## Saline County

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Saline County economy. These 19 sectors have a total direct output of approximately \$948 million and support 2,843.9 jobs in Saline County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture Contribution in Saline County

		0				
		_	_	% of Gross	_	% of Gross
		% of Total	Total	Regional		Regional
Impact Type <sup>2</sup>	Employment	Employment	Value Added <sup>3</sup>	Product <sup>4</sup>	Output <sup>5</sup>	Product
Direct Effect	2,843.9	7%	\$178,221,077	7%	\$948,001,980	35%
Indirect Effect	1,332.3	3%	\$111,600,445	4%	\$201,336,653	7%
Induced Effect	831.4	2%	\$57,060,089	2%	\$97,087,996	4%
Total Effect	5,007.6	13%	\$346,881,612	13%	\$1,246,426,629	46%

As shown in the above table, agriculture, food, and food processing supports 5,007.6 jobs, or 13% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$1246 million, roughly 46% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately \$347 million, or 13% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 13% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="https://implan.com/index.php?option=com\_content&view=category&id=19">https://implan.com/index.php?option=com\_content&view=category&id=19</a>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Frozen specialties manufacturing is the top employer in the agriculture industry with 1,417.1 employees. This table also shows the amount of jobs that are created by the agriculture industry in Saline County.

Top 10 Industries Affected by Employment

	Total	Total
Sector Description:	Employment	Output
Frozen specialties manufacturing	1,417.1	\$460,579,851
Farm machinery and equipment manufacturing	493.0	\$303,896,389
Wholesale trade	465.0	\$87,406,903
Grain farming	249.1	\$42,868,891
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	192.1	\$24,470,263
All other crop farming	160.0	\$9,981,711
Landscape and horticultural services	127.2	\$9,647,802
Truck transportation	108.8	\$15,306,593
Management of companies and enterprises	95.7	\$18,790,517
Full-service restaurants	81.7	\$3,766,421

The Frozen specialties manufacturing industry directly contributes approximately \$461 million to Saline County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

	Total	Total
Sector Description:	Employment	Output
Frozen specialties manufacturing	1,417.1	\$460,579,851
Farm machinery and equipment manufacturing	493.0	\$303,896,389
Wholesale trade	465.0	\$87,406,903
Flour milling	42.3	\$64,294,052
Grain farming	249.1	\$42,868,891
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	192.1	\$24,470,263
Management of companies and enterprises	95.7	\$18,790,517
Truck transportation	108.8	\$15,306,593
Owner-occupied dwellings	0.0	\$14,876,745
Oilseed farming	12.9	\$13,763,718

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Saline County's economy.

Sector Description:	Employment	Output
Oilseed farming	12.9	\$13,763,718
Grain farming	249.1	\$42,868,891
Vegetable and melon farming	0.2	\$20,282
Greenhouse, nursery, and floriculture production	12.5	\$1,080,485
All other crop farming	160.0	\$9,981,711
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		. , , ,
and farming.	192.1	\$24,470,263
Dairy cattle and milk production	6.2	\$564,308
Poultry and egg production	1.0	\$252,685
Animal production, except cattle and poultry and eggs		\$659,512
Commercial logging	1.8	\$116,838
Flour milling	42.3	\$64,294,052
Frozen specialties manufacturing	1,417.1	\$460,579,851
Bread and bakery product, except frozen, manufacturing		\$4,294,025
Frozen cakes and other pastries manufacturing		\$388,057
Breweries		\$4,657,238
Farm machinery and equipment manufacturing		\$303,896,389
All other industrial machinery manufacturing		\$1,820,688
Veterinary services	59.2	\$4,645,186
Landscape and horticultural services	127.2	\$9,647,802

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.